



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor

Ted Stewart
Executive Director

James W. Carter
Division Director

1594 West North Temple, Suite 1210

Box 145801

Salt Lake City, Utah 84114-5801

801-538-5340

801-359-3940 (Fax)

801-538-7223 (TDD)

July 1, 1997

Neal J. Mortensen
Vice President
Western Clay Company
P.O. Box 127
Aurora, Utah 84620

Dear Mr. Mortensen:

Re: Tentative Approval of Notice of Intention to Commence Large Mining Operations, Western Clay Company ("Western"), Hebe Gypsum Mine, M/015/072, (a.k.a. Lone Tree Wedge Gypsum Mine UTU-73779), Emery County, Utah

The Division has completed a review of your response to our June 6, 1997 letter. Information provided in response to our letter included: (1) a fax copy of Western's response letter received June 19, 1997, and (2) a fax copy of the revised mine plan map and a sketch of the typical fencing and berming to be used around highwalls during operations. After reviewing this information, the Division is now prepared to issue its tentative approval for this large mining operation. The Division will publish a notice of its tentative approval decision in the local (county) and Salt Lake City newspapers initiating a 30-day public comment period. Provided no substantive comments are raised during the public comment period, we will then seek approval of the form and amount of reclamation surety from the Board of Oil, Gas and Mining.

The Division has several comments which are intended to clarify details of the permit. The comments are listed separately for your convenience. These comments may require a written commitment from Western prior to final Division approval of your large mining notice. If any of these comments are inaccurate please provide us with the correct information in a written response. Please format your response in a similar fashion.

The next Board hearing is scheduled for Wednesday, July 30, 1997. In order for this item to be included on the July Board Agenda, we will need a complete Reclamation Contract (FORM MR-RC) and the reclamation surety by July 10, 1997. We suggest you provide draft

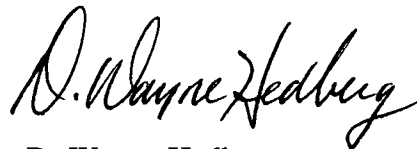
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copies of these documents to our office several days prior to this date so that we may review them for completeness and make corrections if necessary. A Reclamation Contract form and guideline are enclosed for your use. We will provide you with the appropriate joint agency surety form as soon as you inform us of the actual type of surety you wish to post. Whatever form you choose, it will need to jointly list the Division of Oil, Gas and Mining, and the U.S. Department of the Interior, Bureau of Land Management.

The Division currently holds a \$15,000 Letter of Credit ("LOC") as an interim surety with the Utah Independent Bank of Salina, Utah. Western may choose to increase this surety appropriately and add the Bureau of Land Management on the LOC by rider, or post an entirely new form of surety for the required amount. If a new surety is posted, the interim surety would be canceled and returned to you after Board approval of the new form and amount.

Thank you for your cooperation in completing this permitting action. If you have any questions in this regard please contact me or the other team members of the Minerals staff (Tony Gallegos, Lynn Kunzler, Tom Munson).

Sincerely,



D. Wayne Hedberg
Permit Supervisor
Minerals Regulatory Program

jb
Attachments: DOGM Review Comments, reclamation estimate, acreage schedule
Enclosure: MR-RC form, MR-RC Guideline
cc: Neil Simmons, BLM
m15-72.ten

WESTERN CLAY COMPANY
Hebe Gypsum Mine M/015/072
(a.k.a. Lone Tree Wedge Gypsum Mine UTU-73779)
Review Comments June 25, 1997

R647-4-106 Operation Plan

106.3 Estimated acreages disturbed, reclaimed, annually?

The Division has been in contact with the BLM surface management staff regarding the reclamation bond held by the BLM for the road Right-Of-Way ("ROW"). The Division proposed and has received BLM concurrence to include reclamation of the road ROW in the overall reclamation estimate for this project. The BLM would need to be jointly listed on the form of reclamation surety. This will allow Western to post one surety for reclamation of the mine site and BLM access roads. This will effect the mine schedule of disturbed and reclaimed acreages. This would allow Western to cancel the \$5,000 surety posted with the BLM for road reclamation once the new surety is posted and accepted. (AAG)

The Division has recalculated the schedule of disturbed acreages using the information on the back of page 13 of the December 6, 1996, "Proposal to Begin Large Mining Operations" and information describing the road right of way. The Division's revised schedule (copy attached) includes the entire BLM ROW disturbance and the existing 4.95 acres of small mine areas.

The Division's disturbed acreage schedule shows the 1996 disturbance as 4.95 acres of small mine area. The Division's schedule shows the current 1997 disturbance as the small mine area plus the 2.64 acres of current ROW road disturbance. The schedule proposed by Western listed 10.78 acres of proposed new mine disturbance in 1997. After discussions with Western it is now understood that this 10.78 acre figure included the existing SMO disturbance of 4.95. The Division's schedule corrects this figure to be 5.83 acres (10.78 - 4.95) of new mine disturbance. The Division's schedule combines the 4.72 acres of new mine road in 1997 with the 5.83 acres to give 10.55 acres of new mine disturbance. The Division's schedule combines the remaining 3.01 acres approved under the current ROW road with the proposed 1.52 acres of new ROW road disturbance for the new road figure of 4.53 acres.

The Division's revised schedule shows 7.17 acres remain to be reclaimed at the end of the mine life. This 7.17 acre figure equals 5.65 acres of ROW road area plus 1.52 acres of amended ROW road. For complete reclamation of the entire disturbed area Western will need to increase the amount of reclamation by 7.17 acres. The Division's

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rules would treat this associated road disturbance as part of the mine's affected area, while the BLM regulations allow this road to be treated separate from the mine disturbance as a ROW under their surface management regulations. The Division will need a commitment from Western to adjust the proposed mining and reclamation schedule to account for reclamation of this 7.17 acre area, or explain why this was not accounted for. (AAG)

Adjusting the project disturbance for these additional areas brings the total life of mine disturbance (including ROW access road) to 88.67 acres. This total breaks down to 81.5 acres of mine area and 7.17 acres of ROW access road. (AAG)

R647-4-112 Variance

No variances have been requested or granted under the proposed mining and reclamation plan. (AAG)

R647-4-113 Surety

The Division has prepared a revised reclamation cost estimate using the additional information provided in the response letter and provided during a conference call on June 12, 1997, with Western Staff. The amount of surety calculated by the Division for the entire life of mine disturbance including the access road under the BLM ROW is \$143,700. Western will need to post this amount of surety, or propose an alternate amount for some time period less than the entire life of the mine. The Division typically requires a surety amount for a minimum of five years of project disturbance. Please note that the BLM will need to evaluate this surety estimate to determine if the amount satisfies the new BLM bonding regulations. The Division will coordinate with the BLM and Western to arrive at one reclamation surety amount which will satisfy both agencies. (AAG)

RECLAMATION ESTIMATE

Western Clay Company

Hebe Gypsum Mine

M/015/072 (UTU-73779)

last revision 06/27/97
filename M15-72.WB2 page "ESTIMATE"
Emery County

Prepared by Utah State Division of Oil, Gas & Mining

- This estimate is for the entire life of mine disturbance
- There are no permanent structures or facilities at the mine site
- Ore is stockpiled within the active quarry areas which eliminates stockpile pads
- All surface drainages will be restored & culverts removed during final reclamation
- The main access road disturbance is included in a Right Of Way with the BLM
- This estimate includes reclamation costs for the access road within the ROW
- Overburden will be regraded into quarry excavations & graded to blend with the natural contours
- Cryptobiotic soils which were salvaged will be spread on the graded surface prior to seeding
- Endangered cacti will be located prior to mining & their seeds harvested
- Endangered cacti within the mine area will be transplanted to reclaimed areas
- All affected areas will be seeding by broadcast or drill seeding methods
- DOGM estimate of maximum disturbance is 58.17 acres with concurrent reclamation schedule

-Amount of disturbed area which will receive reclamation treatments = 88.7 acres

-Estimated total disturbed area for this mine = 88.7 acres

Activity	Quantity	Units	\$/unit	\$	
Safety gates, signs, etc. (mnts & installation)	1	sum	200	200	(1)
Equipment removal - trucking	5	trips	58	290	(2)
Debris removal - dump fees	30	CY	6	180	(3)
Debris & equipment removal - loading with FE loader	4	hours	166	664	(4)
Demolition & debris removal - general labor	8	hours	32	256	(5)
Regrading facilities areas	1.0	acre	496	496	(6)
Replacing overburden	132,454	CY	0.31	41,061	(7)
Regrading for soil placement - 50% of mine area	40.8	acre	397	16,178	(8)
Ripping access roads within mine area - dozer	3.0	acre	347	1,041	(9)
Replacing soils on mine access roads - dozer	3.0	acre	397	1,191	(8)
Ripping access road - ROW	7.2	acre	544	3,900	(10)
Regrading access road - ROW	7.2	acre	397	2,846	(8)
Cacti survey	3	year	500	1,500	(11)
Cacti transplanting	750	plant	16	12,000	(12)
Cacti seed harvesting	5	year	1000	5,000	(13)
Cacti storage treatment & handling	2	year	500	1,000	(14)
Drainage restoration & culvert removal - west 42" dia	50	CY	3.06	153	(15)
Drainage restoration & culvert removal - west 12" dia	8	CY	3.06	24	(15)
Drainage restoration & culvert removal - east 36" dia & fill	450	CY	3.40	1,530	(16)
Replacing cryptogamic soil - mechanical spreader	2,000	CY	2.77	5,540	(17)
Broadcast seeding (~28 lb/acre)	10.0	acre	180	1,800	(18)
Drill seeding (~14 lb/acre)	71.5	acre	125	8,938	(19)
Drill seeding (~14 lb/acre) -ROW road area	7.2	acre	125	896	(19)
General site cleanup & trash removal - 40% of total area	32.6	acre	50	1,630	(20)
Equipment mobilization - Salina - ~60 miles	4	equip	600	2,400	(21)
Reclamation Supervision - 1/2 total project days	13	days	356	4,628	(22)
		Subtotal		115,343	
10% Contingency				11,534	
		Subtotal		\$126,877	
Escalate for 5 years at 2.52% per yr				16,813	
		Total		\$143,690	
		Rounded surety amount in yr 2002-\$		\$143,700	
Average cost per disturbed acre =		\$1,620			

Average cost per disturbed acre =

Rounded surety amount in yr 2002-\$

\$143,700

\$1,620

RECLAMATION ESTIMATE

Western Clay Company

Hebe Gypsum Mine

M/015/072

last revision

06/26/97

filename M15-72.WB2

page "ESTIMATE"

Emery County

Prepared by Utah State Division of Oil, Gas & Mining

NOTES ON UNIT COSTS USED

- (1) DOGM lump sum assumed
- (2) Means 1997, 020-620-5100, \$0.48/mile for >8CY truck; assumed 120 miles round trip
- (3) Means 1997, 020-612-0320, avg, bldg construction mtl's, \$6/CY
- (4) Rental Rate Blue Book 4/96, Cat 988B, 7CY, & Means 1997, Crew B-10U
- (5) Means 1997, Crew A-1A, general laborer including O&P \$32.17/hr
- (6) Means 1997 & Rental Rate Blue Book 4/96: Cat D10N, U, mtl 2550 lb/CY, 100 ft push, assumes 1 ft dept
- (7) Means 1997 & Rental Rate Blue Book 4/96: Cat D10N, U, mtl 2550 lb/CY, 100 ft push
- (8) Means 1997 & Rental Rate Blue Book 4/96: Cat D10N, U, mtl 2550 lb/CY, 75 ft push, assumes 1 ft depth
- (9) Means 1997 & Rental Rate Blue Book 4/96: Cat D10N, U, multi shank rippers, speed 0.8 mph
- (8) Means 1997 & Rental Rate Blue Book 4/96: Cat D10N, U, mtl 2550 lb/CY, 75 ft push, 1 ft depth
- (10) Means 1997 & Rental Rate Blue Book 4/96: Cat D10N, U, multi shank rippers, speed 0.5 mph
- (8) Means 1997 & Rental Rate Blue Book 4/96: Cat D10N, U, mtl 2550 lb/CY, 75 ft push, 1 ft depth
- (11) lump sum estimated for surveys during first 3 years
- (12) estimate 1/2 hr/ plant, Means 1997, Crew A-1A, general laborer including O&P \$32.17/hr
- (13) assumed annual sum for harvesting during first 5 years
- (14) assumed annual sum assumed for first 2 yrs, assumed direct transplant after that
- (15) Means 1997, 022-254-0120, 1CY hydraulic backhoe, 4' - 6' deep
- (15) Means 1997, 022-254-0120, 1CY hydraulic backhoe, 4' - 6' deep
- (16) Means 1997, 022-254-0910, 1CY hydraulic backhoe, 10' - 14' deep
- (17) Means 1997, 029-208-0300 plant bed preparation, skid steer loader, on site topsoil
- (18) DOGM estimate: seed \$175/acre + truck-broadcaster-operator \$5/acre; 10 acres/hr
- (19) DOGM estimate: seed \$90/acre + tractor-drill-operator \$35/acre
- (19) DOGM estimate: seed \$90/acre + tractor-drill-operator \$35/acre
- (20) DOGM general estimate
- (21) estimated \$300 each way per piece of equipment
- (22) Means 1997, 010-036-0180, project manager, minimum \$1780/wk

06/27/97

-Column "adjusted total" = total disturbed - released this year

Year	Stage	Adjusted Total	Total Disturbed	Begin. Disturb.	Total New	New Road	New Mine	Reclaimed this year	Released in 3 yrs	Released in 2 yrs	Released in 1 yr	Released this year
1996			4.95		4.95		4.95					
1997	NOW	7.59	7.59	4.95	2.64	2.64						
1997	4th Q	22.67	22.67	7.59	15.08	4.53	10.55	1.64	1.64			
1998	1	31.67	31.67	22.67	9	0	9	2.83	2.83	1.64		
1999	1	40.36	40.36	31.67	8.69	0	8.69	5.91	5.91	2.83	1.64	
2000	2	48.72	50.36	40.36	10	0	10	13.88	13.88	5.91	2.83	1.64
2001	2	50.89	53.72	48.72	5	0	5	0	0	13.88	5.91	2.83
2002	2	49.2	55.11	50.89	4.22	0	4.22	13.36	13.36	0	13.88	5.91
2003	3	44.29	58.17	49.2	8.97	0	8.97	9.21	9.21	13.36	0	13.88
2004	3	50.29	50.29	44.29	6	0	6	0	0	9.21	13.36	0
2005	4	42.02	55.38	50.29	5.09	0	5.09	6.08	6.08	0	9.21	13.36
2006	4	37.72	46.93	42.02	4.91	0	4.91	8.17	8.17	6.08	0	9.21
2007	END MINE	41.84	41.84	37.72	4.12	0	4.12	0	0	8.17	6.08	0
2008		35.76	41.84	41.84	0	0	0	20.42	20.42	0	8.17	6.08
2009		27.59	35.76	35.76	0	0	0	0	0	20.42	0	8.17
2010		27.59	27.59	27.59	0	0	0	0	0	0	20.42	0
2011		7.17	27.59	27.59	0	0	0	0	0	0	0	20.42
2012		7.17	7.17	7.17	0	0	0	0	0	0	0	0
TOTALS					88.67	7.17	81.5	81.5	81.5	81.5	81.5	81.5